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ABSTRACT

The general education component of the curriculum (McGrail Plan) at Nazareth College, Michigan, was evaluated in preparation for a North Central Self-Study. Twenty-five 1980 freshmen and 93 of the 1981 seniors who had completed 4 years of study at the college were administered the American College Testing (ACT) program Objective Test and Activity Inventory of the College Outcomes Measurement Project. The information from these instruments provided specific measures of student performance on the following six education outcomes, which closely parallel those specified by the college: communicating, solving problems, clarifying values, functioning within social institutions, using science and technology, using the arts. Nazareth student scores were compared with normative data derived from 130 other colleges and universities. To determine how students and alumni feel about the McGrail Plan and the overall educational program, the ACT Education Services Survey Student Opinion Survey and Alumni Survey Instruments were used. The Student Opinion Survey was completed by 55 sophomores and 70 juniors in 1981. Among the findings are the following: Nazareth freshmen are average in their entering level abilities in the general education outcomes measures; Nazareth seniors were somewhat lower in entrance-level ability than the senior norm group; in all areas except communicating and solving problems, Nazareth seniors compared favorably to the senior reference group; and significant growth in general education occurs between freshmen and seniors and greatest gains occur in solving problems, clarifying values, and using the arts. Alumni were found to have a positive subjective evaluation of the growth they experienced. (SW)

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U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION

EVALUATING INSTITUTIONAL EFFECTIVENESS

PLANNING FOR THE FUTURE

A REPORT OF AN EVALUATION STUDY
AT NAZARETH COLLEGE

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EVALUATING INSTITUTIONAL EFFECTIVENESS:
PLANNING FOR THE FUTURE

BACKGROUND

This is a decade in which the general public is hesitant to accept de facto the value of higher education. Students, parents, taxpayers, legislators and employers are constantly questioning whether or not a college degree can be used in any way as an indicator of intellectual development or of the ability of an individual to function successfully in adult society. Colleges and universities will therefore find it increasingly necessary to demonstrate the uniqueness and quality of their educational missions and the relevance of their curricula to the knowledge and skills needed to function effectively in society. Institutions must demonstrate the effective role they play in preparing graduates to meet society's ever-changing needs by providing clear, precise, and objective descriptions of the educational outcomes of their programs. Hence the need for comprehensive evaluation of institutional effectiveness in order to plan for the future and perhaps even the survival of our colleges and universities.

Since institutional evaluation is a very complex task, it is important to identify some basic assumptions before determining the particulars of the evaluation process. The first assumption is that institutional evaluation will be an increasing part of higher education in the 1980's - whether we like it or not!

Since this is a time of dwindling financial resourses for education as a whole, some evaluative criteria will of necessity develop in order to determine how the limited educational dollar will be allocated. In addition, prospective students and their parents are constantly making evaluative judgements when selecting the institution in which they plan to invest their time, talents, and money. Secondly, the over-all purpose of institutional appraisal should be to improve the academic enterprise. Evaluation can help us determine where we are being successful in achieving the educational outcomes we desire and where improvement is needed to meet the standards we have set for ourselves. Thirdly, although institutional evaluation is indeed complex, it can be done objectively and perceptively. Fourth, institutional quality can and should be defined. This definition needs to embrace the specific goals and mission of the institution but must be stated in ways which are intelligible to the general public. Finally, institutional quality is a composite of inter-dependent elements, therefore, it is not sufficient merely to examine each component separately but it is equally important to assess the synergistic interactions among all components of the educational system.

One major component of the curriculum at all colleges and universities is, of course, what has been termed "general education". It is this portion of the curriculum which, in the past, was viewed as the element which provided the core of general knowledge that was necessary for successful adult living. Today, we recognize that we can not limit our evaluation of student growth to specific facts and concepts acquired in any segment of

the curriculum but we must also determine the ability to apply specific facts and concepts in work, family, and community roles. Thus, the recent resurgance of concern regarding the role of the general education segment of the curriculum has a broader scope than past considerations.

It has been more than three years since the Carnegie Foundation For the Advancement of Teaching stated its conclusion that general education is now a disaster area and implied that unless colleges can define what they intend to accomplish in general education, how it will benefit their students and can deliver an effective general education curriculum, they should seriously consider eliminating it completely. Although much discussion has occured since the report, there is still no agreement on the goals of a general education curriculum. Ernest Boyer and Arthur Levine of the Carnegie Foundation study group recently suggested that general education today can be compared to the spare room in a house, "with no one responsible for its oversight and everyone permitted to use it as he will". (Chronicle of Higher Education, April 13, 1981).

Further complicating the issue is a question regarding the relationship of the general education curriculum to the traditional liberal arts. At a national conference on liberal education sponsored by the Fund for the Improvement of Post Secondary Education and the Exxon Education Foundation during the spring of 1981, about 300 faculty members and academic administrators discussed the relationship between general education and liberal learning in their institutions. Although they did not agree on a definition of liberal education, they did agree that it is not identical with general education. They felt that general education was a part of liberal education

but that liberal learning should have additional "specific outcomes for students. (Chronicle of Higher Education, June 15, 1981). While this type of distinction may provide an interesting intellectual exercise for academicians, it may also further obscure key issues surrounding curriculum evaluation and measurement of institutional effectiveness, especially in the minds of the general public.

Although general education is certainly an important aspect of any institutional-wide evaluative study, it is important to remember that it is none-the-less only one component of a very complex entity. Additional key areas to be considered in determining institutional effectiveness include: the quality of professional or career programs, the nature of the campus academic climate which results from a host of attitudes and values of staff members plus the manner in which programs and services are delivered, the congruence of college-wide goals and objectives with those of specific programs, examination of goverance structures and finally the perceptions of the outside community regarding the institution's effectiveness in meeting current needs.

Of course, unless the information obtained through an institutional study is made available to all segments of the academic community, discussed and evaluated in light of the hopes and asperations of administrators, trustees, faculty, staff and students it can not be useful in the planning process. Only those associated with an institution can reflect meaningfully upon the statistical data generated and translate it into creative and useful ideas, programs, and suggestions which can improve the over-all functioning of the institution. This type of critical self-examination requires vision and courage but the potential rewards to the participants, the students, the institution and society as a whole are well worth the

time and energy required for such a project.

THE NAZARETH COLLEGE APPROACH TO INSTITUTIONAL EVALUATION: OVERVIEW OF THE PROJECT

INTRODUCTION

In preparation for a North Central Self-Study, an Evaluation Task Force was appointed by the President to formulate an evaluation plan for the college.

Recognizing that it was impossible for the college to carefully evaluate all aspects of the institution simultaneously, the task force generated an evaluation plan which consisted of three (3) phases:

Phase I - Evaluation of the General Education Component of the curriculum (McGrail Plan)

Phase II - Evaluation of administrative services and the congruence of college-wide goals and objectives with those of specific programs

Phase III - Evaluation of Governance Structures and External perceptions/relations

It was recognized that many other aspects of the college as a whole could also be evaluated, (i.e., evaluation of faculty effectiveness) but the above elements were considered of greatest importance by the task force either because they had not been previously evaluated or because there was no other campus committee or group addressing the issues in a particular area.

Since a major curricula change had occurred at Nazareth College during the last ten years, the task force decided to concentrate its efforts on Phase I of the evaluation plan and to recommend to the college

that Phases II and III be initiated at a future time following completion of the initial evaluation phase. This report will present a summary* of the results of research conducted for Phase I of the study which was made possible through a grant from the W. K. Kellogg Foundation. It is hoped that the information presented will be a useful model for you as you examine your institution and attempt to determine its effectiveness. We do not present our work as an "ideal" approach, but only as an approach that has been useful to us. We welcome your comments and suggestions and hope that we can explore together during this conference ways in which we as institutions can meet the challenges posed by the complex task of institutional evaluation.

History

Prior to 1974, Nazareth College was a traditional, Catholic, liberal arts college. Although we had become coeducational in 1971, our students were predominantly female, residential and Catholic. Teacher education was the biggest professional program and nursing was rapidly growing as a significant major.

The Social Services component of the curriculum provided options for students interested in the broad fields of social work, psychology and sociology. Of course, students could major in a wide variety of traditional liberal arts majors such as English, history, foreign language, and philosophy as well.

*Detailed descriptions of each component of the study and corresponding results can be obtained by contacting the project director.

After careful study and review by an all-college study group, the curriculum of the college received a major revision and seventeen (17) majors were eliminated in 1974. The resulting curriculum, called the McGrail Plan*, focused on professional development in one of five (5) human service career areas balanced by what we call the liberating arts and sciences (general education).

Today, Nazareth College is truly coeducational but a smaller proportion of the student body are residential. While maintaining its Catholic identity, nearly 49% of the today's students come from other faiths. Our curriculum focuses on human service careers in management, nursing and other health areas, social work, education, criminal justice, and interdisciplinary/pre-professional studies. We have maintained a strong committment to the liberal arts and although students are not required to take specific courses, they are required to demonstrate that they have met some basic liberating arts and science expectations before they can graduate.

Since the changes described above represent major dimensions of the college environment and program, the evaluation task force decided to concentrate its efforts of the evaluation of the McGrail Plan. Although the McGrail Plan consists of two components, the professional development and the liberating arts and sciences (general education) component, it was felt that the emphasis of this study should be upon the general education outcomes resulting from the Nazareth College curriculum. The professional dimensions are extensively evaluated by a variety of professional accrediting agencies; however, the overall impact of the college's general education program had not previously been assessed.

*Unique aspects of this plan are described in the McGrail Handbook. Those desiring program details may obtain a copy by contacting the project director.

Research Questions

In order to evaluate the general education component of the curriculum, the research project was designed to obtain data that would describe, in objective terms, the degree of success the college is achieving in relation to the general education goals which were formulated by the college and translated into the liberating arts and science expectations required for graduation. In addition, the need for more subjective data supplied by students and alumni evaluating various aspects of the McGrail Plan and over-all satisfaction with the educational experience at Nazareth College was recognized.

Research questions to address these issues were developed. They are:

A. What degree of success is the College achieving through its general education program?

   1. What is the actual level of student performance in regard to general education outcomes and how does this compare to similar groups at other institutions?

   2. What amount of growth may be anticipated to occur as a consequence of the College program?

   3. How do alumni evaluate the growth they experienced in general education outcomes while at Nazareth?

B. What opinions/perceptions do students and alumni have about the McGrail Plan?

   1. What general perceptions/opinions are held?

   2. What is the degree of perceived integration between the professional and liberal arts and sciences components of the curriculum?

   3. Is the Human Service thrust supported by the total McGrail Plan?

C. Are students and alumni satisfied with their over-all experience at Nazareth College?

Method and Instruments

In order to answer these research questions, all 1980 freshmen (93) and all of the 1981 seniors who had completed four years of study at Nazareth College (36) were invited to take the ACT COMP Objective Test and Activity Inventory. Twenty-five (25) seniors and 93 freshmen actually participated in this phase of the study. The information from these instruments provided specific measures of student performance on six (6) educational outcomes which closely parallel those specified by the College (see Table 1). Comparison of Nazareth student scores with normative data derived from 130 other colleges and universities enabled us to assess the quality of the Nazareth program in relation to other institutions of higher education.

Table 1

ACT COMP Outcomes in Relation to McGrail Expectations

ACT Outcome	McGrail Outcome
Communicating	Communicating
Solving Problems	Approaches to Inquiry
Clarifying Values	Ethical Values and Religious Meaning
Functioning within Social Institutions	Social-Cultural Relations
Using Science and Technology	Approaches to Inquiry
Using the Arts	Creativity and Aesthetic Awareness

To determine how students and alumni feel about the McGrail Plan and to assess the level of satisfaction regarding the over-all educational program of the College, the ACT Education Services Survey (ESS) Student Opinion Survey and Alumni Survey Instruments were used. The Student Opinion Survey was completed by 55 sophomores and 70 juniors during the Winter of 1981. Alumni/ae from the class of 1971 (Pre-McGrail Plan) and from the class of 1978 (McGrail Plan) were asked to participate in the Alumni/ae Survey.

51% of the 1978 graduates and 33% of the 1971 graduates who were contacted agreed to participate in the study.

Data from each of these instruments was carefully analyzed by appropriate quantitative, statistical and descriptive techniques and conclusions regarding the research questions were reached. The results of these studies are presented in the next sections of this report*.

ASSESSING STUDENT GROWTH IN GENERAL EDUCATION

The Instruments Used

The Objective Test and Activity Inventory of the American College Testing Program (ACT) College Outcomes Measurement Project (COMP) were the instruments selected to help us determine the degree of success Nazareth College is achieving in relation to general education outcomes.

In 1976 ACT organized the College Outcome Measurement Project to design, develop, validate and distribute assessment tools and procedures that would measure and evaluate certain kinds of knowledge and skills that undergraduate students were expected to acquire as a result of general education. The knowledge and skills identified were those believed necessary for successful functioning in adult society by representatives of institutions and state agencies which ACT knew had invested time and effort in attempting to identify realistic competencies and outcomes. ACT staff took the suggestions of these academicians, did an extensive review of the literature and then worked with representatives to identify proposed domains for the 564 outcome statements generated. Six (6) domains were identified through this process: Communicating, Solving Problems,

*Details on each instrument, method of analysis and results are presented in separate reports available upon request from the project director.

Clarifying Values, Functioning with Social Institutions, Using Science and Technology and using the Arts.

Over 150 institutions have participated in the field testing of the three instruments designed as a result of the project; the Composite Examination, the Objective Test and the Activity Inventory. Questions in the Composite Examination and the Objective Test are based on realistic stimulus materials drawn from the adult public domain such as television documentaries, recent magazine articles, ads, short stories, art prints, music, discussions and newscasts. Both print and non-print stimuli are used and the response formats vary (short-answer, multiple-choice, self-report). While the Composite Examination (open-ended response format) and Objective Test (multiple choice format) measure directly the ability of students to apply general knowledge and skills to problems and issues commonly confronted by adults, the Activity Inventory provides a self-report about the extent of participation in various out-of-class activities in each of the six (6) major outcome areas.

Research conducted by ACT during the field testing phase of the project produced a number of significant findings.

1. Student performance on the COMP Test battery appears to be unrelated to simple maturation and related to the educational programs of participating institutions.

2. The COMP Test battery measures abilities not measured directly by college grades or content - specific tests.

3. The COMP Test battery appears to measure abilities relevant to functioning in adult roles in society.

4. The Objective test provides a quick and inexpensive way to estimate how groups of participants will perform on the Composite Examination.

5. The Activity Inventory measures the same general education knowledge and skills, but from a different perspective than the other two instruments.*

*For details of ACT research projects and results see COMP: Summary Report of Research and Development 1976-1980, 1980 ACT, Iowa City, Iowa.

Since it was recognized that people do not communicate, clarify values or solve problems (process skills) without some content involved and likewise, these process skills are central to effective functioning within social institutions, using the arts and using science and technology, a two-dimensional matrix was developed to represent more realistically the integrated manner in which the six (6) Competencies are likely to exist within individuals. This COMP Matrix is:

	Using Science and Technology	Functioning within Social Institutions	Using the Arts
Communicating			
Solving Problems			
Clarifying Values			

This matrix is reflected in the scoring mechanism of each of the COMP instruments. The total score represents the scores on each sub-set of the test after the amount of inter-relationship has been factored out.

Results and Discussion

Research Question #A

1. *What is the actual level of student performance in regard to general education outcomes and how does this compare to similar groups at other institutions?*

In order to be able to analyze the results of this special COMP testing, it is necessary to consider the entering achievement levels of each sample, as measured by composite scores on the ACT General College Test. Norms for the Nazareth groups are therefore compared to specific reference group norms in order to make appropriate conclusions regarding the test results.

Freshmen Data

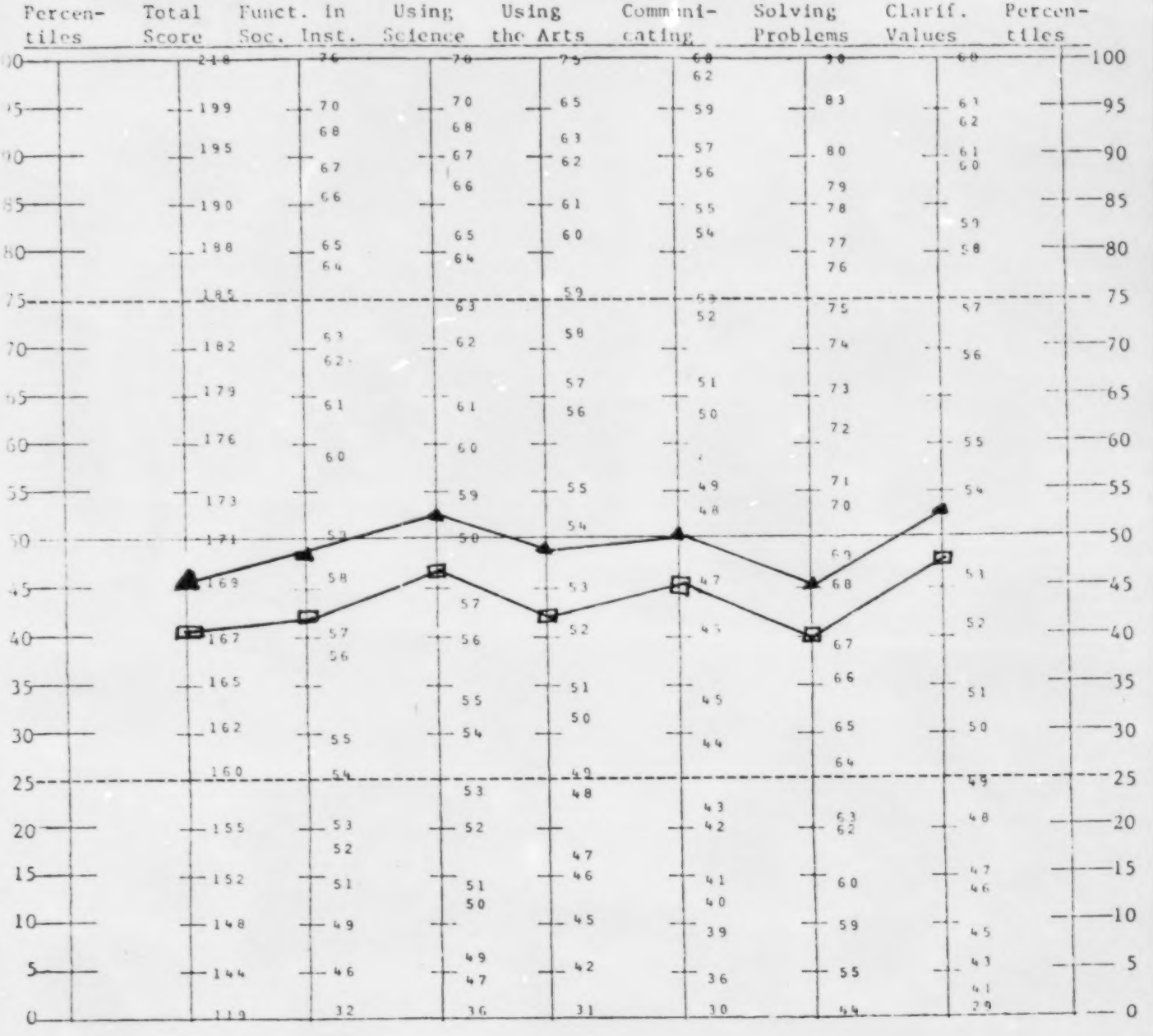
Since Nazareth freshmen were somewhat lower in mean ACT composite score (18.1 to 19.8), than the reference group, it was necessary for us to adjust the mean freshmen pattern on the objective test by five (5) percentile points in order to make the sample comparab'e to the reference group (the amount of necessary adjustment was indicated by ACT in their COMP report). Once the adjustment was made, Nazareth freshmen are quite close to the 50th percentile for the reference group based on 896 freshmen at 12 institutions. Figure 1 presents actual and adjusted means for the freshmen sample. Figure 2 presents the Activity Inventory scores of Nazareth freshmen in comparison with a reference group composed of 411 traditional age (17-19) freshmen at ten (10) institutions. It should be noted that Nazareth freshmen were again near the 50th percentile for freshmen in the reference group on all scales. Thus we can conclude that Nazareth freshmen demonstrate average entering level abilities in the six (6) general education outcomes measured by the study.

Senior Data

The Nazareth seniors were also somewhat lower in entering level ability as measured by the mean ACT Composite score (19.9 compared to 22.0) compared to the reference group. Therefore, it was again necessary for us to adjust the mean senior pattern on the objective test by eight (8) percentile points in order to make the sample comparable to the reference group (adjusted in accordance with recommendations in ACT COMP Report). Once this adjustment was made, the Nazareth senior sample compared favorably with college seniors generally in most areas assessed by the instrument. Figure 3 presents actual and adjusted scores for the senior objective test.

Figure 4 presents the Activity Inventory Scores of Nazareth seniors in comparison with a senior reference group. Except in the areas of Communicating and Solving Problems, Nazareth seniors compare quite favorably to seniors in the reference group. Thus we can conclude that Nazareth seniors demonstrate average exit-level abilities in the six (6) general education outcomes measured by the study.

Figure 1 ACT COMP
Objective Test (Form III)
1980 Entering Freshmen Norms for 896 Freshmen at 12 Institutions
□ Mean Scores for 93 Nazareth College Freshmen (ACT Mean 18.1)
▲ Adjusted Mean Scores based on ACT Differential



	Total Score	Funct. in Soc. Inst.	Using Science	Using the Arts	Communicating	Solving Problems	Clarif. Values
Mean	171.7	58.9	58.7	54.1	48.5	69.7	53.5
s.d.	17.6	7.0	6.8	7.0	6.6	8.3	6.0

Description of the 896 Freshmen in the 1980 Reference Group

36% Men
64% Women

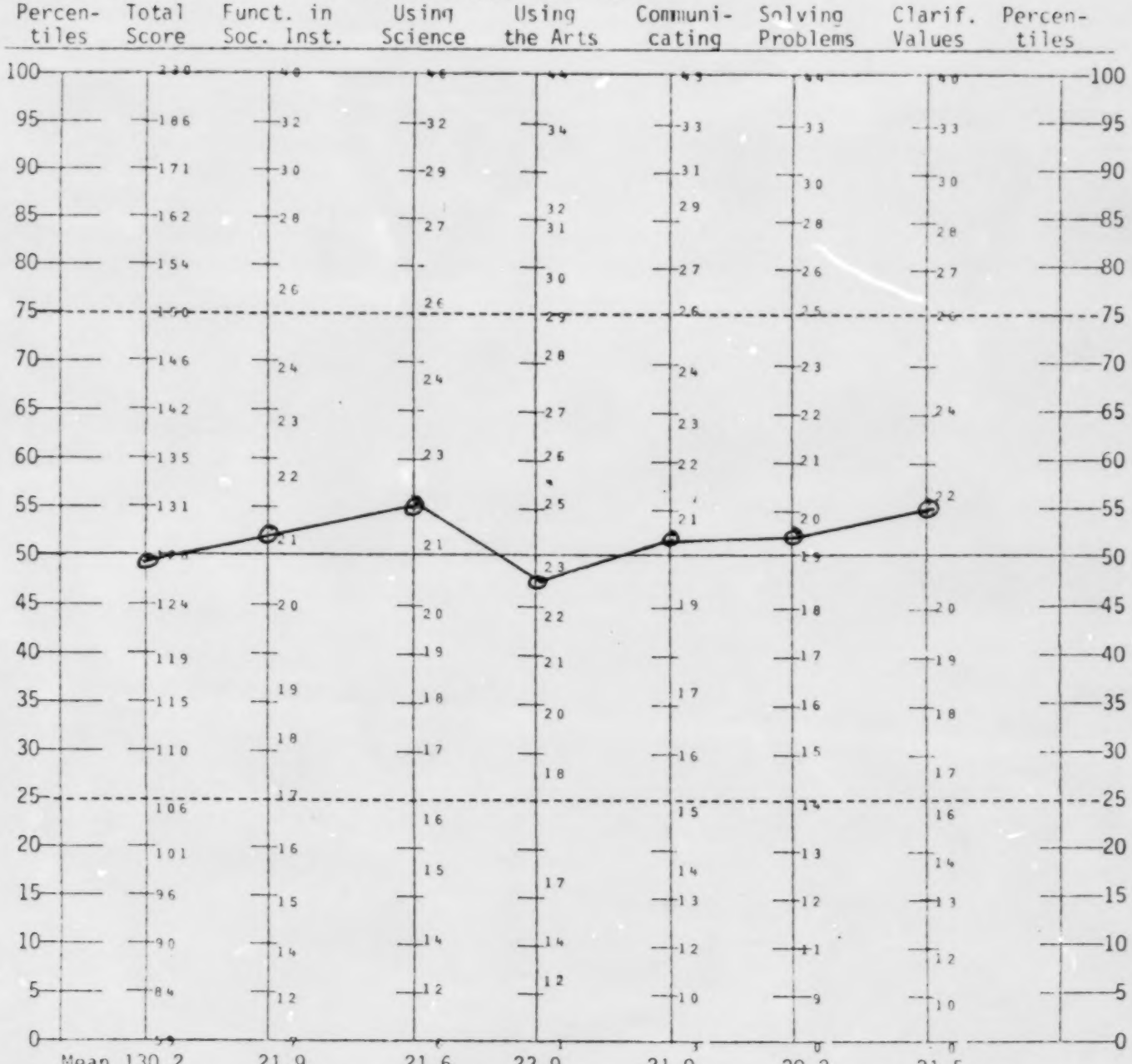
Area of Interest
42% Social Sciences
34% Natural/Biol. Sciences
23% Arts/Humanities

Age Range
93% Age 19 or below
4% Age 20-22
3% Age 23 or above

Act Composite (or equivalent for SAT Total) scores available for 662 students. Mean 19.8
Median range 19-21

ACT Composite Range
3% below 10
9% 10-12
13% 13-15
15% 16-18
19% 19-21
17% 22-24
16% 25-27
7% 28-30
2% over 30

Figure 2
COMP/ACT Activity Inventory
Means For 93 Nazareth College Freshmen in Relation to Reference Group Norms



62% Women
38% Men
Area of Interest
8% Social Sciences
13% Natural Sciences
5% Arts/Humanities
74% Missing

Age Distribution
1% age 17
40% age 18
59% age 19
Ethnic Representation
78% White
10% Black
4% Other Minorities
8% Missing

ACT Composite Range (or equivalent for SAT Total). Scores available for 95 students.
3% ACT 1-9
2% ACT 10-12
12% ACT 13-15
12% ACT 16-18
17% ACT 19-21
21% ACT 22-24
34% ACT 25-36

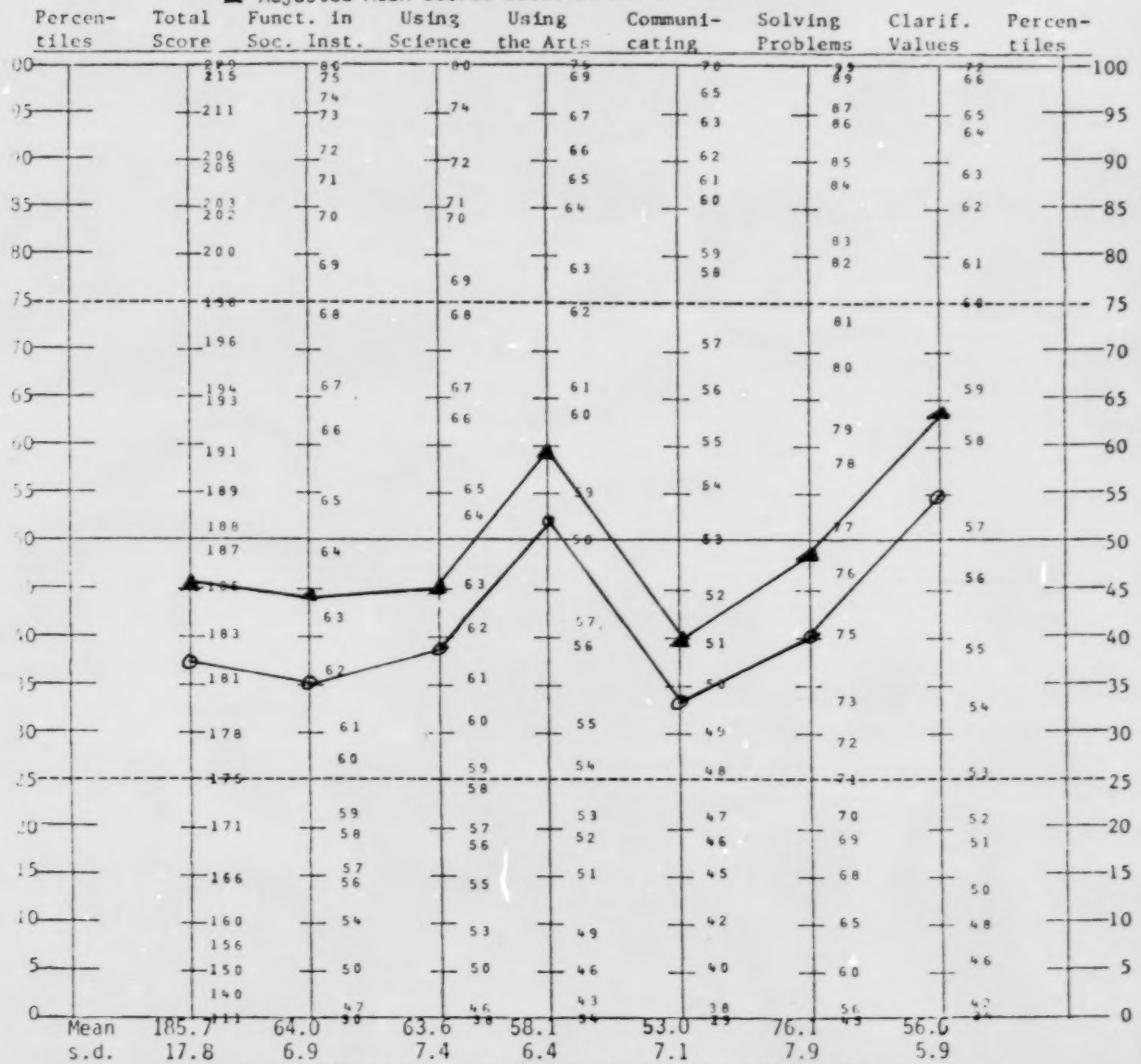
Figure 3

COMP/ACT Objective Test (Form III)

1980 Senior Norms For 1886 Seniors at 30 Institutions

○ Mean Scores for 25 Nazareth College Seniors (ACT Mean 19.9)

▲ Adjusted Mean Scores based on ACT Differential



DESCRIPTION OF THE 1886 SENIORS IN THE 1980 REFERENCE GROUP

Area of Interest
54% Social Science
27% Natural/Biol. Sciences
19% Arts/Humanities

Ethnic Representation
22% Black
5% Am. Indian
71% White
2% Other

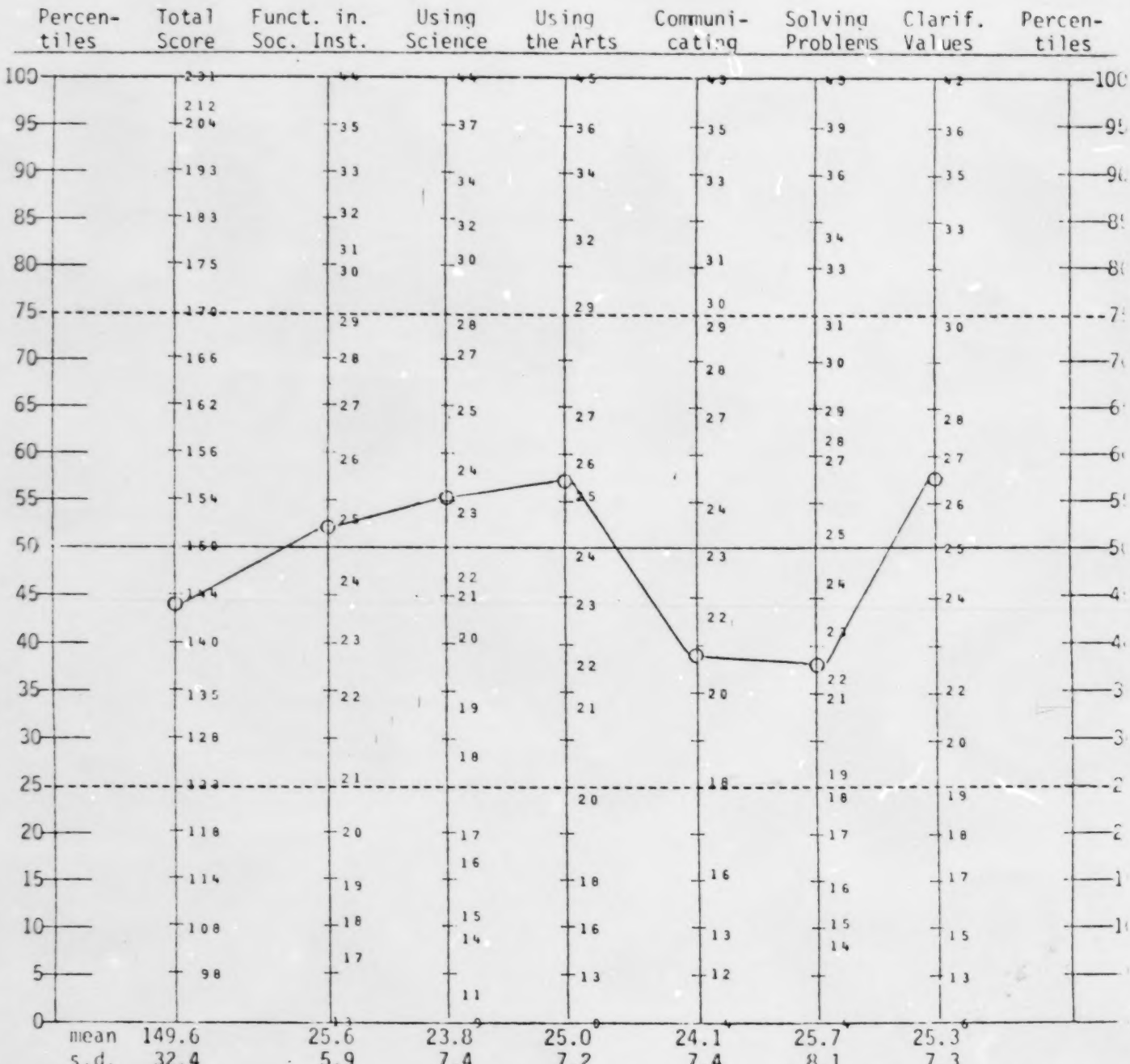
50% Men
50% Women

Age Range
65% Age 20-22
24% Age 23-30
11% Age 31 or above

ACT Composite (or equivalent for SAT Total) scores available for 1248 students.
Median range 22-24 Mean 22.0

ACT Composite Range
2% below 10
5% ACT 10-12
9% ACT 13-15
10% ACT 16-18
16% ACT 19-21
21% ACT 22-24
21% ACT 25-27
14% ACT 28-30
2% over 30

Figure 4
COMP/ACT Activity Inventory
Plotted on Norms For 266 Seniors at 11 Institutions
o Means For 25 Nazareth College Seniors (ACT Mean-19.9)



44% Women
56% Men

Area of Interest
15% Social Sciences
44% Natural Sciences
8% Arts/Humanities
33% Missing

Age Distribution
22% age 20
8% age 21
54% age 22
16% age 23

Ethnic Representation
92% White
5% Black
3% Other Minorities

ACT Composite Range (or equivalent for SAT Total)
Scores available for 156 students
1% ACT 10-12
3% ACT 13-15
13% ACT 16-18
12% ACT 19-21
12% ACT 22-24
60% ACT 25-36

Research Question #A

2. *What amount of growth may be anticipated to occur as a consequence of the college program?*

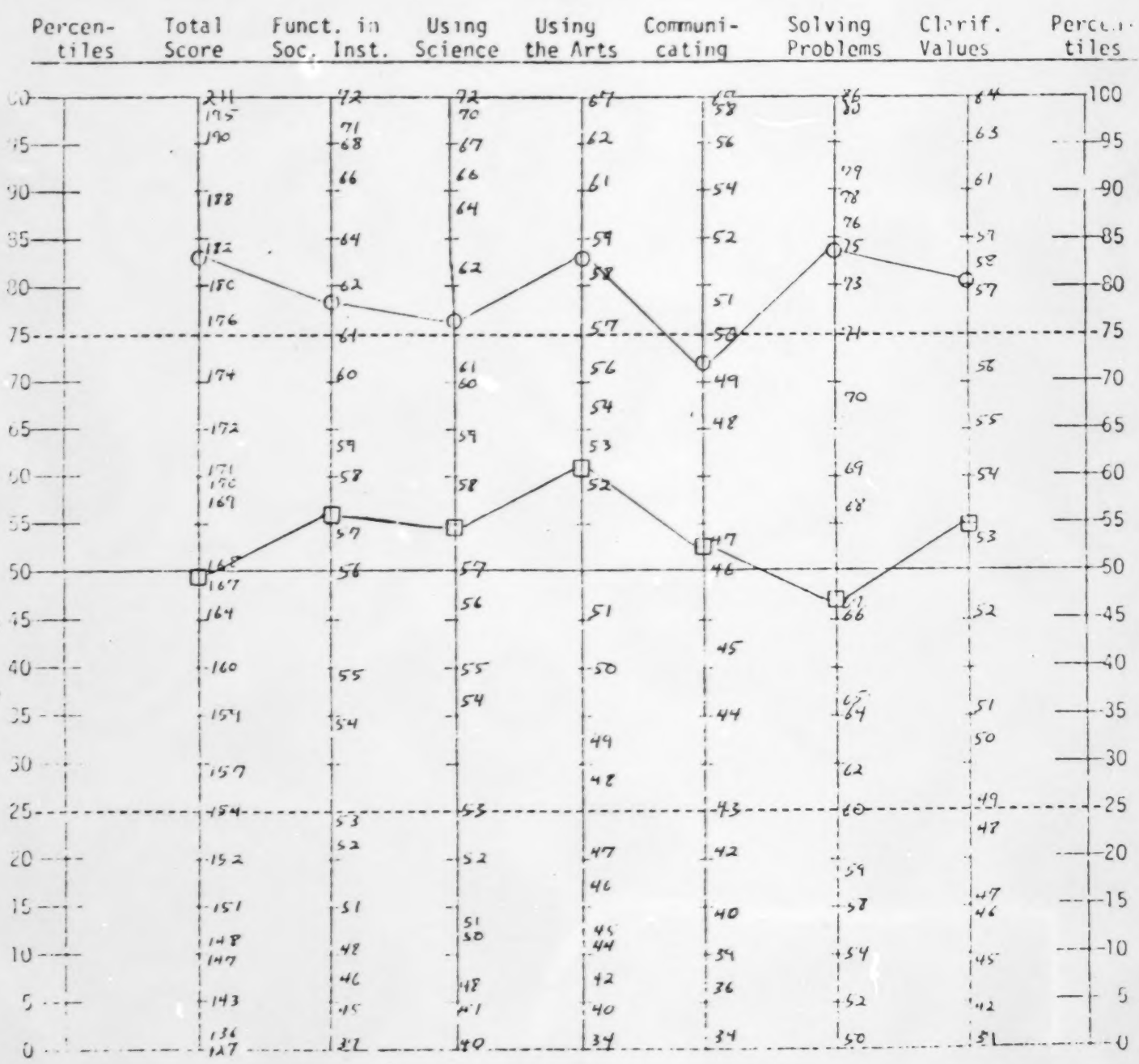
In order to measure potential growth in terms of general education outcomes, comparisons were made between the scores of the Nazareth freshmen and senior samples on both the ACT Comp Objective Test and the Activity Inventory. Extensive testing of these two instruments conducted by ACT in conjunction with over one hundred colleges and universities revealed that student performance on the objective test appears to be related to the educational programs of the participating institutions and unrelated to simple maturation. In addition the Comp Examination appears to measure abilities not measured by college grades or content-specific tests, which are abilities relevant to functioning effectively in adult roles (Comp Summary Report of Research and Development). Given this information about the instruments used, the Task Force felt that if the senior and freshmen groups were comparable in entering achievement, the data generated by the study would clearly suggest the amount of growth which might occur in freshmen over a four-year period as a consequence of our educational program.

Since the mean ACT composite score for the seniors (19.9) was within one standard deviation of the freshmen mean (18.1), it was concluded that the freshmen and senior samples were roughly comparable groups in entering achievement.

Figure 5 presents both freshmen and senior norms on the Objective Test based on Nazareth College freshmen normative data. Note that the "average senior" scored almost 35 percentile points higher than the "average freshmen" in terms of total score. Greatest gains occurred in Solving Problems, with a percentile gain of 40 points from freshmen to senior year. In addition, a gain of 25 percentile points occurred in Clarifying values and Using the Arts. Least growth was indicated in Communicating and using Science and Technology.

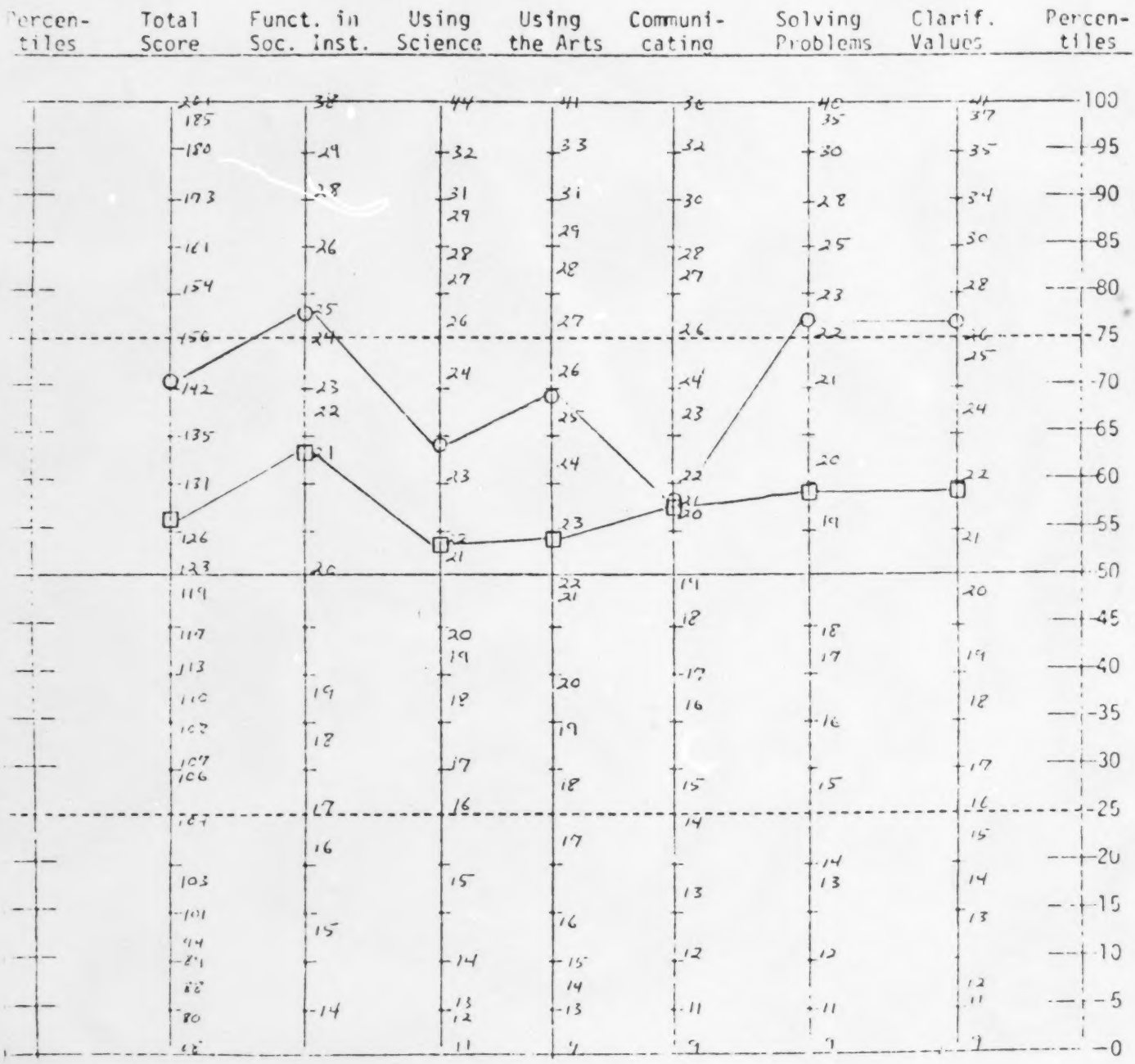
The growth measured by the Activity Inventory is presented in Figure 6. Again, greatest gains occurred in Clarifying Values and Solving Problems with additional significant growth occurring in Functioning within Social Institutions. Least growth occurred in Communicating and using Science and Technology.

Figure 5
COMP/ACT Objective Test (Form III)
Comparison Groups: 93 Nazareth College Freshmen



○ = Means for 25 NC Seniors (ACT mean = 19.9)
□ = Means for 93 NC Freshmen (ACT mean = 18.1)

Figure 6
COMP/ACT Activity Inventory (Form II
Comparison Group: 93 Nazareth College Freshmen



○ = Means for 95 NC Seniors (ACT mean = 19.9)
□ = Means for 93 NC Freshmen (ACT mean = 18.1)

EVALUATING GENERAL EDUCATION OUTCOMES
AN ALUMNI PERSPECTIVE

The Instrument Used

The impact that the college has had on graduates of the institution in regard to general education outcomes was explored by administering the ACT Education Services Survey (ESS) Alumni Survey instrument to a sample of Pre-McGrail Plan and McGrail Plan graduates. There are six (6) sections to this multiple-choice, optical-scan instrument which collects a vast amount of data that should be useful to the college in a number of ways in addition to answering some of the research questions that were a part of the study. Section I obtains demographic data and current alumni activities and plans; Section II relates to the continuing education of graduates; Section III facilitates evaluation of the institution in terms of the quality of education received and the effect of the college on personal development; Section IV explores employment history; Section V contained institutionally designed questions regarding the McGrail Plan; and Section VI obtained mailing address information and preferences.

A total of 68 alumni from the class of 1971 (Pre-McGrail) and the class of 1978 (McGrail) responed to the survey. The 28 McGrail graduates who responded represented 51% of the class of 1978 who we were able to contact while the 40 Pre-McGrail graduates responding represent 33% of the class of 1971. The task force was quite pleased with these response levels given the fact that the normative response levels for this type of survey are considerably lower than those obtained by our study. Therefore, the representative nature of the respondents for alumni in each sub-group is probably quite high.

The class of 1971 and the class of 1978 were chosen not only because these graduates had experienced different educational programs at Nazareth College but also because the fact that they graduated within the same decade would help to minimize differences that might be due to societial and cultural factors operative at the time of their college experience. Since this instrument can not account for differences due to simple maturation, differences in major life tasks of each alumni sub-group nor differences due to socio-cultural influences, it is important to keep these factors in mind when interpreting the data generated by this portion of the study.

Results and Discussion

Research Question #A

3. *How do alumni evaluate the growth they experienced in general education outcomes while at Nazareth?*

While we did not attempt to obtain objective outcome measures from our alumni sample, we did feel that it was important to obtain the subjective evaluation of a sample of alumni/ae regarding the impact the college curriculum had upon them in achieving certain general education outcomes. Section III of the Alumni Survey instrument identifies some commonly accepted general education outcomes and asks alumni to indicate how much their education at Nazareth contributed to their growth in each area. The response options are "very much", "somewhat", "very little", and "blank". There are twenty-four (24) questions presented in this format. A significant trend is indicated if at least one half (50%) of the total sample respond in a similar fashion to an item. Differences between McGrail graduates and Pre-McGrail graduates were also noted. A difference in percentage rating between these groups of twenty (20) or more points is considered noteworthy.

Ten (10) items received a score of 50% or more in the "very much" category, these items are listed in Table 2 in decending rank order based on percentage response.

Table 2

Rank Order of "very much" Responses

Item	Total Alumni Response	McGrail Pre-McGrail Difference
Work Independently	73.5%	None
Persisting at Different Tasks	67.6%	None
Learning on Own	66.2%	None
Defining & Solving Problems	63.2%	None
Organizing Time Effectively	58.8%	None
Understanding and Appreciating Arts	55.9%	None
Writing Effectively	54.4%	Pre-McGrail Higher
Understanding Written Information	54.4%	Pre-McGrail Higher
Planning and Carrying Out Projects	54.4%	None
Understanding Differences Among Philosophies & Cultures	52.9%	None

Only three (3) items in the "somewhat" category were scored in such a way as to indicate a trend. These items are listed in decending rank order in Table 3.

Table 3

Rank Order "somewhat" Response

Item	Total % Score	McGrail Pre-McGrail Difference
Understanding Graphic Information	61.8%	None
Speaking Effectively	54.4%	None
Recognizing Assumptions, Making Logical Inferences and Reaching Correct Conclusions	52.9%	None

Only three (3) items indicated a trend in the "very little" category of response. These items are listed in Table 4.

Table 4

Rank Order "very little" Response

Item	Total % Score	McGrail Pre-McGrail Difference
Managing Personal/ Family Finances	54.4%	None
Understanding of Consumer Issues	54.4%	None
Understanding and Applying Math in Daily Activities	50%	None

The above data suggest that the over-all alumni subjective evaluation of the impact that the college had on effecting growth in general education areas was positive since over 40% of the items received a "very much" rating. While some differences exist between Pre-McGrail and McGrail alumni groups, these differences are relatively minor in relation to the total response pattern.

Research Question #B

1. *What general perceptions/opinions are held regarding the McGrail Plan?*

The response format to items in the Alumni Survey which might answer this research question was somewhat variable. As might be anticipated, 96.4% of McGrail graduates indicated that they understood the purpose of the McGrail Plan, while only 17.5% of Pre-McGrail alumni understood the plan. Both McGrail and Pre-McGrail graduates indicated strongly (89.3% and 65% "yes") that they were encouraged to recognize that out-of-class activities could help meet educational goals.

A total of 64.3% of McGrail graduates disagreed or strongly disagreed with a question suggesting that they might prefer a required core of Liberating Arts and Science courses.

An additional 21 questions were scored with a scale of:

A = Strongly Agree
B = Agree
C = Neutral
D = Disagree
E = Strongly Disagree
F = Not Applicable
G = I don't know

A favorable response to an item was indicated if 60% or more responded with either "A" or "B" or if the question was negatively stated "D" or "E". Differences in response patterns between McGrail alumni and Pre-McGrail alumni were also noted. A difference of 20 percentage points in scoring was considered noteworthy.

Thirteen (13) items received favorable responses from both Pre-McGrail and McGrail alumni. Table 5 shows the items and the response pattern listed in descending rank order by percentage.

Table 5

Favorable Alumni Response On McGrail Plan

Item	% McGrail	%Pre-McGrail
1. Helped increase interpersonal skills	85.7%	95%
2. Can apply knowledge of humanities and fine arts to profession	67.9%	80%
3. Can apply knowledge of science and math to profession	85.7%	77.4%
4. See relationship between general education and professional competencies	82.1%	70%
5. Appreciate general education because it enriches life	89.9%	82.5%
6. Prepared for successful functioning after leaving college	66.4%	87.5%
7. Encouraged personal development	67.8%	92.5%*
8. Encouraged learning in areas outside of professional field	82.1%	90%
9. Learned from other students	89.3%	95%
10. Goals for attending college satisfied	78.6%	87.5%
11. Instilled desire for life-long learning	82.2%	95%
12. Christian attitudes/values evident	71.5%	85%
13. Concern for human service strengthened	71.5%	90%

*Noteworthy difference in response

An additional six (6) items were rated positively by either Pre-McGrail alumni or McGrail alumni. They are listed in Table 6 in descending rank order by percentage.

Table 6

Favorable Response of Alumni Sub-Groups on McGrail Plan

Item	% McGrail	% Pre-McGrail
1. In general education, references to professional facts/concepts made	67.9%	37.5%*
2. Professional courses enhanced by facts/concepts of general education	64.3%	57.2%
3. Out-of-class experiences as valuable as in-class	57.1%	70.0%
4. Upperclassmen helpful	53.5%	70.0%
5. Easy to find congenial student associates	50.0%	85.0%*
6. Unique talents accepted and nutured	46.4%	62.5%

*Noteworthy difference in response

The above data indicate a favorable opinion by alumni regarding the McGrail Plan and/or specific elements of the McGrail Plan which were a part of the Nazareth curriculum both before and after the McGrail Plan was instituted.

Research Question #B

2. *What is the degree of perceived integration between the professional and liberal arts and sciences components of the curriculum?*

The Alumni data generated from this study supports the concept of perceived integration between both aspects of the curriculum, although there are a few noteworthy differences between Pre-McGrail and McGrail alumni. This statement is supported by the following results:

1. Both alumni groups indicate that they can apply knowledge of humanities, fine arts, science and mathematics to their professional area.

2. Both perceive a relationship between general education and professional competencies.

3. Both appreciate general education because it enriches life.

4. Both felt encouraged to learn in areas outside of professional field.

5. McGrail alumni felt that references to professional facts/ concepts were made in their general education courses and Pre-McGrail alumni did not.

6. McGrail alumni had a stronger perception that their professional courses were enhanced by facts/concepts of general education than did Pre-McGrail alumni.

Also noteworthy is that Pre-McGrail alumni perceived that they were encouraged in their personal development to a much higher degree (92.5% vs 67.8%) than did McGrail alumni.

Research Question #B

3. Is the Human Service thrust supported by the McGrail Plan?

One of the institutionally-designed questions in Section V asked the alumni to indicate to what degree their concern for human service was strengthened as a result of their educational experience at Nazareth College. Both Pre-McGrail and McGrail alumni responded very favorably to this item. Although the difference in rating between the two groups was not quite large enough to be considered noteworthy (the difference was less than 20% points), it is interesting to observe that Pre-McGrail alumni responded positively with a 90% rating while the response of the McGrail alumni was only 71.5%

Research Question # C

Are alumni satisfied with their over-all experience at Nazareth College?

The Alumni Survey provided an opportunity for only a very generalized expression of satisfaction. Over 70% (71.5%) of McGrail alumni indicated that if they were to start college over again, they would choose to attend Nazareth, while 52.5% of Pre-McGrail alumni responded with a definite or probable "yes" to this question. Approximately two-thirds of both McGrail (67.9%) and Pre-McGrail (62.5%) alumni indicated that they felt that the quality of education received at Nazareth College was better than that of other colleges. An extremely high percentage of alumni indicated that regardless of the financial benefits, the education provided by the college improved the quality of their lives (McGrail 96.4%, Pre-McGrail 97.5%). Finally, McGrail graduates expressed the strong belief that the College had prepared them well for their present occupation (82.2%) while 67.5% of Pre-McGrail alumni held this opinion.

EVALUATING THE CLIMATE FOR GROWTH

The Instrument Used

In order to assess the attitudes and opinions of current students regarding the McGrail Plan and to determine the level of overall student satisfaction with college services, programs and the academic environment in general, the ACT Evaluation Survey Service Student Opinion Survey was administered to 55 sophomores and 70 juniors during the winter of 1981. This instrument is a multiple-choice, optical scan document with five (5) sections. Section I collects demographic data and background variables; Section II and III enable students to express their

degree of satisfaction with specific services and programs provided by the college as well as their level of useage of each service and their over-all reactions to a variety of characteristics of the college environment: Section IV contained institutionally-designed questions on the McGrail Plan and Section V provided an opportunity to write comments and suggestions.

Results and Discussion

Research Question B.

1. *What general perceptions/opinions about the McGrail Plan are held by students?*

The general attitudes and perceptions of current sophomore and junior students toward the McGrail Plan were assessed through use of the ACT Student Opinion Survey (N=125), Section IV, institutionally-designed questions, which were designed to solicit general opinions and perceptions. The response scale used was:

A = Strongly Agree	E = Strongly Disagree
B = Agree	F = Not Applicable
C = Neutral	G = I don't know enough about this item
D = Disagree	

A favorable response to an item was indicated if 60% or more of the students responded with either "A", Strongly Agree, or "B", Agree or if the question was negatively stated "D" or "E". Twelve (12) of these 20 questions received favorable responses. Seven (7) received a response over 66.7%. These questions and the percentage of positive responses follow.

1. 87.2% - I think I can apply my knowledge of science and mathematics.

2. 78.4% - I think I can apply my knowledge of humanities and fine arts to my professional career.

3. 76.4% - I have learned from other students.

4. 72% - I believe that Nazareth College is preparing me for successful functioning after I leave college.

5. 70.8% - Nazareth College is encouraging my learning in areas of knowledge outside of my professional field.

6. 70.4% - I appreciate the knowledge I gain through my humanities, fine arts, and science/math (LAS) courses because I believe that this type of learning enriches my life.

7. 67.2% - My goals for attending college are being satisfied.

Three (3) of these 20 questions received a rating of less than 51% on responses "A" and "B". They were:

1. 36% - My unique, special talents (even though they may be outside my professional field) are accepted and nurtured by my professors.

2. 43.2% - It's easy to find a congenial group of students to go with you to movies, etc.

3. 49.6% - Christian attitudes and values are evident on campus.

The above data indicate that sutdents generally hold a positive opinion about virtually all aspects of the McGrail Plan.

Research Question B.

2. *What is the degree of perceived integration between the professional and liberal arts and sciences components of the curriculum?*

The preceeding section reports significant aspects of the Student Opinion Survey including some data which also addresses the above research question. The fact that current students perceive an integration between professional and general education components of the curriculum is supported by the following results:

1. 87.2% felt that they could apply knowledge of science and mathematics to their professional area.
2. 78.4% indicated they could apply knowledge of humanities and fine arts to their professional area.
3. 70.8% believed they were being encouraged in learning outside of the area of their professional field.
4. 70.4% appreciate knowledge gained through general education courses because it enriches life.

Research Question C

Are students satisfied with their over-all experience at Nazareth College?

The Student Opinion Survey provided extensive opportunity for students to express their opinions about all aspects of the college, services, academic programs and general campus environment* The following is an attempt to summarize in a meaningful way the tremendous volume of data generated by this component of the study.

Over-all Nazareth student satisfaction with college services and programs and the general campus environment were compared to the satisfaction level of a normative reference group composed of students from other private four-year colleges. Generally, Nazareth students demonstrated satisfaction levels which were equal to or greater than the levels demonstrated by the

*Details of this Survey are available in a separate report available from the project director.

reference group in relation to the programs and services offered by the college. Items which received low satisfaction ratings involved services or programs which either are not offered by Nazareth College, are at a beginning level of development, or did not pertain to sophomores or juniors (e.g., Job Placement Services).

Students were also asked to indicate satisfaction levels for 42 aspects of the college environment. Twenty-four (24) of these environmental factors were rated higher in satisfaction by Nazareth students compared to the normative sample. Ten (10) items received very high satisfaction ratings not only in relation to the Nazareth sample but also in relation to comparisons with the normative group. These are:

1. Racial Harmony
2. Condition of buildings and grounds
3. Concern for student as an individual
4. General admissions procedures
5. General registration procedures
6. Preparation being received for future occupation
7. Attitude of college non-teaching staff towards students
8. Classroom facilities
9. Class size relative to type of course
10. Out-of-class availability of instructors

CONCLUSIONS AND RECOMMENDATIONS

General Education Outcomes

The results of the ACT COMP testing of Nazareth freshmen and seniors indicates that:

1. Nazareth freshmen are slightly lower in entrance level ability than freshmen in the norm group, but, none-the-less, score close to the normative mean in all areas measured by the study. Nazareth freshmen are, therefore, average in their entering level abilities in the general education outcomes measured.

2. Nazareth seniors were also somewhat lower in entrance level ability than the senior norm group; however, in all areas except communicating and solving problems, Nazareth seniors compare quite favorably to the senior reference group.

3. Significant growth in general education occurs between freshmen and seniors who remain at Nazareth four years with the "average senior" scoring almost 35 percentile points higher than the "average freshman" in total score. Greatest gains occur in solving problems, clarifying values and using the arts. Least growth occurs in communicating and using science and technology.

4. Alumni have a positive subjective evaluation of the growth they experienced in terms of general education outcomes while at the college. Some differences exist between McGrail and Pre-McGrail graduates.

5. Considering all available data, Nazareth College appears to be doing a satisfactory job in terms of the general education components of the curriculum.

Recommendations Relative to General Education Outcomes

The Task Force recommends that appropriate faculty groups study the data in detail in order to determine if we, as a college, are satisfied with the growth levels indicated and to determine ways in which we can increase potential student growth particularly in the areas of communicating and using science and technology. Examination of certain differences

between McGrail and Pre-McGrail alumni might offer some suggestions for potential curricular/instructional changes which might positively influence student growth.

Opinions/Perceptions Regarding the McGrail Plan

The Student Opinion Survey and the Alumni Survey suggest that:

1. On the whole, Nazareth students are quite positive in their evaluation of the McGrail Plan and its elements.
2. McGrail alumni have a clear understanding of the purpose of the McGrail Plan, but less than one-fifth (1/5) of Pre-McGrail alums have this type of understanding.
3. A high percentage of all alumni favor the McGrail Plan and/or a majority of the elements which compose the plan.
4. Current students perceive an integration between professional and general education components of the curriculum.
5. Alumni in general, but McGrail graduates in particular, perceive in integration between professional and general education components of the curriculum.
6. Both groups of alumni indicate the experience at Nazareth College strengthened their concern for human service.

Recommendations Relative to the Opinions/Perceptions Regarding the McGrail Plan

The Task Force recommends that the College, through the Alumni Office, increase its efforts to help Pre-McGrail Plan graduates develop an understanding of the McGrail Plan and how it relates to the curriculum they experienced while students at Nazareth.

Over-all Satisfaction

Student Opinion Survey Results and Alumni Survey results indicate that:

1. The over-all student satisfaction with college service and programs is high compared to normative groups.

2. Students are quite satisfied with the general campus environment

3. Alumni are generally satisfied with their education experiences at Nazareth College

4. Alumi strongly indicate that the quality of their lives was improved as a result of their Nazareth College education

Recommendations Relative to Over-all Satisfaction

The Task Force recommends that all units of the college evaluated in the Student Opinion Survey be given access to the data that pertains to their area in order to assess additional ways to improve services to students. Also, a committee should be established to examine aspects of campus environment which did not receive high satisfactory ratings to determine ways to correct difficulties.

In conclusion, it appears that Nazareth College is meeting its general education goals in a satisfactory manner. Areas for improvement have been identified by this study and the detailed summaries of each aspect of the research which will be available as displays during the site visit. The data generated by the study should assist Nazareth College to continue to improve the educational programs and services provided for students in the years ahead.